CENTER FOR BEAM PHYSICS SEMINAR

"Optical Stochastic Cooling and its Application to RHIC"

Max Zolotorev
CBP (LBNL)

Friday May 30, 2003, 10:30 AM
(this seminar was originally scheduled for April 25)
••• Refreshments served at 10:20 AM •••

Albert Ghiorso Conference Room (71-264), LBNL

Abstract: Wide band optical amplifiers can be used for stochastic cooling of stored beams of relativistic charge particles. Possible application of Optical Stochastic Cooling techniques to beams of electrons, muons, protons and heavy ions will be discussed.

Biographical data and research interests: Max Zolotorev obtained his Ph.D. from the Institute of Nuclear Physics in Novosibirsk, Russia, in 1974. His thesis was devoted to the generation of super-high magnetic fields for the measurement of hyperon magnetic moments. He then worked on electron-quark neutral currents with L. Barkov, with whom, in 1978, he discovered parity violation in atoms. This discovery was the first observation of the electron-quark electroweak interaction. In the last years Max has been working on optical stochastic cooling, generation of x-rays , FELs, beam instrumentation, and atomic physics. Max is a former Professor of the Novosibirsk State University, Russia.